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FILING DATE: *March 26, 2004*

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PTO/SB/16 (01-04)

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PROVISIONAL APPLICATION FOR PATENT COVER SHEET

This is a request for filing a PROVISIONAL APPLICATION FOR PATENT under 37 CFR 1.53(c).

Express Mail Label No. EV313042135US

INVENTOR(S)

Given Name (first and middle [if any])	Family Name or Surname	Residence (City and either State or Foreign Country)
Dennis G.	Griepentrog	DePere, Wisconsin

Additional inventors are being named on the _____ separately numbered sheets attached hereto

TITLE OF THE INVENTION (500 characters max)**ROLLING DESK**Direct all correspondence to: **CORRESPONDENCE ADDRESS**

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OR

<input type="checkbox"/> Firm or Individual Name	Boyle, Fredrickson, Newholm, Stein & Gratz, S.C.				
Address	250 East Wisconsin Avenue, Suite 1030				
Address					
City	Milwaukee	State	WI	Zip	53202
Country	US	Telephone	414-225-9755	Fax	414-225-9753

ENCLOSED APPLICATION PARTS (check all that apply)

<input checked="" type="checkbox"/> Specification Number of Pages 9	<input type="checkbox"/> CD(s), Number _____
<input checked="" type="checkbox"/> Drawing(s) Number of Sheets 6	<input type="checkbox"/> Other (specify) _____
<input type="checkbox"/> Application Data Sheet. See 37 CFR 1.76	

METHOD OF PAYMENT OF FILING FEES FOR THIS PROVISIONAL APPLICATION FOR PATENT

<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27.	FILING FEE Amount (\$)
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[Page 1 of 2]

Respectfully submitted,

SIGNATURE 

TYPED or PRINTED NAME Andrew S. McConnell

TELEPHONE 414-225-9755

Date 3/26/04

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(if appropriate)

Docket Number: 1335.099

USE ONLY FOR FILING A PROVISIONAL APPLICATION FOR PATENT

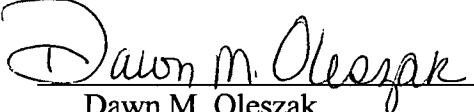
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 Dawn M. Oleszak March 26, 2004
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FEE TRANSMITTAL for FY 2004

Patent fees are subject to annual revision.

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First Named Inventor	Dennis G. Griepentrog
Examiner Name	
Group Art Unit	
Attorney Docket No.	1335.099

METHOD OF PAYMENT (check all that apply)				FEE CALCULATION (continued)																																																																																																																											
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ADDITIONAL FEES <table border="1"> <thead> <tr> <th>Large Entity</th> <th>Small Entity</th> <th colspan="2">Fee Paid</th> </tr> <tr> <th>Fee</th> <th>Fee</th> <th>Fee</th> <th>Fee</th> </tr> </thead> <tbody> <tr> <td>105</td> <td>130</td> <td>205</td> <td>65 Surcharge – late filing fee or oath</td> </tr> <tr> <td>127</td> <td>50</td> <td>227</td> <td>25 Surcharge – late provisional filing fee or cover sheet</td> </tr> <tr> <td>139</td> <td>130</td> <td>139</td> <td>130 Non-English specification</td> </tr> <tr> <td>147</td> <td>2,520</td> <td>147</td> <td>2,520 For filing a request for ex parte reexamination</td> </tr> <tr> <td>112</td> <td>920*</td> <td>112</td> <td>920* Requesting publication of SIR prior to Examiner action</td> </tr> <tr> <td>113</td> <td>1,840*</td> <td>113</td> <td>1,840* Requesting publication of SIR after Examiner action</td> </tr> <tr> <td>115</td> <td>110</td> <td>215</td> <td>55 Extension for reply within first month</td> </tr> <tr> <td>116</td> <td>420</td> <td>216</td> <td>210 Extension for reply within second month</td> </tr> <tr> <td>117</td> <td>950</td> <td>217</td> <td>475 Extension for reply within third month</td> </tr> <tr> <td>118</td> <td>1,480</td> <td>218</td> <td>740 Extension for reply within fourth month</td> </tr> <tr> <td>128</td> <td>2,010</td> <td>228</td> <td>1,005 Extension for reply within fifth month</td> </tr> <tr> <td>119</td> <td>330</td> <td>219</td> <td>165 Notice of Appeal</td> </tr> <tr> <td>120</td> <td>330</td> <td>220</td> <td>165 Filing a brief in support of an appeal</td> </tr> <tr> <td>121</td> <td>290</td> <td>221</td> <td>145 Request for oral hearing</td> </tr> <tr> <td>138</td> <td>1,510</td> <td>138</td> <td>1,510 Petition to institute a public use proceeding</td> </tr> <tr> <td>140</td> <td>110</td> <td>240</td> <td>55 Petition to revive – unavoidable</td> </tr> <tr> <td>141</td> <td>1,330</td> <td>241</td> <td>665 Petition to revive – unintentional</td> </tr> <tr> <td>142</td> <td>1,330</td> <td>242</td> <td>665 Utility issue fee (or reissue)</td> </tr> <tr> <td>143</td> <td>480</td> <td>243</td> <td>240 Design issue fee</td> </tr> <tr> <td>144</td> <td>640</td> <td>244</td> <td>320 Plant issue fee</td> </tr> <tr> <td>122</td> <td>130</td> <td>122</td> <td>130 Petitions to the Commissioner</td> </tr> <tr> <td>123</td> <td>50</td> <td>123</td> <td>50 Processing fee under 37 CFR 1.17(q)</td> </tr> <tr> <td>126</td> <td>180</td> <td>126</td> <td>180 Submission of Information Disclosure Stmt</td> </tr> <tr> <td>581</td> <td>40</td> <td>581</td> <td>40 Recording each patent assignment per property (times number of properties)</td> </tr> <tr> <td>146</td> <td>770</td> <td>246</td> <td>385 Filing a submission after final rejection (37 CFR § 1.129(a))</td> </tr> <tr> <td>149</td> <td>770</td> <td>249</td> <td>385 For each additional invention to be examined (37 CFR § 1.129(b))</td> </tr> <tr> <td>179</td> <td>770</td> <td>279</td> <td>385 Request for Continued Examination (RCE)</td> </tr> <tr> <td>169</td> <td>900</td> <td>169</td> <td>900 Request for expedited examination of a design application</td> </tr> </tbody> </table>				Large Entity	Small Entity	Fee Paid		Fee	Fee	Fee	Fee	105	130	205	65 Surcharge – late filing fee or oath	127	50	227	25 Surcharge – late provisional filing fee or cover sheet	139	130	139	130 Non-English specification	147	2,520	147	2,520 For filing a request for ex parte reexamination	112	920*	112	920* Requesting publication of SIR prior to Examiner action	113	1,840*	113	1,840* Requesting publication of SIR after Examiner action	115	110	215	55 Extension for reply within first month	116	420	216	210 Extension for reply within second month	117	950	217	475 Extension for reply within third month	118	1,480	218	740 Extension for reply within fourth month	128	2,010	228	1,005 Extension for reply within fifth month	119	330	219	165 Notice of Appeal	120	330	220	165 Filing a brief in support of an appeal	121	290	221	145 Request for oral hearing	138	1,510	138	1,510 Petition to institute a public use proceeding	140	110	240	55 Petition to revive – unavoidable	141	1,330	241	665 Petition to revive – unintentional	142	1,330	242	665 Utility issue fee (or reissue)	143	480	243	240 Design issue fee	144	640	244	320 Plant issue fee	122	130	122	130 Petitions to the Commissioner	123	50	123	50 Processing fee under 37 CFR 1.17(q)	126	180	126	180 Submission of Information Disclosure Stmt	581	40	581	40 Recording each patent assignment per property (times number of properties)	146	770	246	385 Filing a submission after final rejection (37 CFR § 1.129(a))	149	770	249	385 For each additional invention to be examined (37 CFR § 1.129(b))	179	770	279	385 Request for Continued Examination (RCE)	169	900	169	900 Request for expedited examination of a design application
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SUBMITTED BY			Complete if applicable		
Name (Print/Type)	Andrew S. McConnell	Registration No. (Attorney/Agent)	32,272	Telephone	414-225-9755
Signature				Date	3/26/04

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ROLLING DESK

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1
ROLLING DESK

A desk 10 includes a desk top 12 supported by a leg 14. The desk 10 is supported on the ground by the base arrangement 16. The base arrangement 16 is further 5 connected to a seat 17.

The desk top 12 defines side edges 11, 13 and end edges 24, 25 which cooperate to define the outer periphery of the desk top 12. In the illustrated embodiment, the desk top 12 is rectangular, however other shapes are envisioned. The desk top 12 has an underside 28. The underside 28 of the desk top 12 includes an ovular indentation or hand 10 grip 44. The hand grip 44 is configured to allow a user to insert his or her fingers into the grip 44 to assist in maneuvering the desk 10. A rectangular plate 30 is secured to the underside 28 of the desk top 12. The plate 30 may be secured to the underside 28 by means of bolts, screws or other fasteners. A tubular leg extension 32 is mounted to plate 30 and extends downwardly therefrom. The leg extension 32 is configured to be received within the 15 leg 14 in a telescoping manner. The leg extension 32 includes a series of vertically spaced apertures 34. The spaced apertures 34 are configured to receive a retaining pin 36 which secures the leg extension 32 within the leg 14. In the illustrated embodiment, the leg 14 is at least partially hollow and defines an opening or passage 9 configured to receive the leg 20 extension 32. The leg 14 further comprises an aperture 38 near its upper end configured to align with the apertures 34 of the leg extension 32 and further configured to receive a retention pin 36.

The leg extension 32 includes a bushing 40 fitted to its lower end, and the leg 14 includes a bushing 42 fitted to its upper end. Bushings 40, 42 provide a stable support for leg extension 32, and facilitate movement of the leg extension 32 within the passage 9 of the 25 leg 14. The interaction of the bushings 40, 42 allows the desk top 12 to be smoothly raised, lowered and secured at varying heights consistent with the desired aligned apertures 34, 38. In use and operation, when a specific height arrangement is desired, the user raises or lowers the slidably attached leg extension 32 within the hollow passage 9 of the leg 14 until a desired height is achieved. Once the desired height is selected, the nearest leg extension

aperture 34 is aligned with the leg aperture 38 and the pin 36 is inserted through the aligned apertures 34, 38 thereby vertically securing the desk top 12 in place. Removal of the pin 36 allows the desk top 12 to be raised and lowered to a new desired height.

The base arrangement 16 is comprised of a circular base plate 21 and a cover 5 or bell 22 configured to fit over the base plate 21. The base plate 21 includes a series of spaced holes 19 configured to receive a securing means (not shown) such as bolts or screws, to secure base plate 21 and bell 22 together. Connected to the base plate 21 and extending laterally are two tubular desk support legs 18a, 18b, and a tubular seat connection leg 20. In the illustrated embodiment, the proximal ends of the support legs 18a, 18b, and the seat 10 connection leg 20 meet in a spoke-type arrangement around the center of the base plate 21. The proximal ends of the legs 18a, 18b, and 20 are preferably welded to base plate 21, although a nut and bolt arrangement or any other securing means may be employed. Leg 14 is connected to and extends upwardly from the base plate 21, through the center of the support legs 18a, 18b and seat connection leg 20. The leg 14 may also be welded or secured 15 to base plate 21 by any other known securing means.

Bell 22 is a dome shaped member having a circumference at its lower end that is equal to or slightly greater than the circumference of the base plate 21. Bell 22 includes a circular wall 35 extending around the bottom circumference and configured to be generally aligned with the circumference of the base plate 21. A dome 37 extends from the wall 35 and 20 covers the proximal ends of the support legs 18a, 18b and the seat connection leg 20. At the peak of the dome 37 of the bell 22 is a circular hole 23 configured to receive the leg 14. Cut away from the wall 35 and dome 37 of the bell 22 are three slots 24a-c, configured to fit over and receive the support legs 24a, 24b and the seat connection leg 20. The bell 22 can be constructed of steel, aluminum or plastic and may be welded or fastened onto the base plate 25 21 in any satisfactory manner.

At the distal end of the support legs 18a, 18b are matching tubular castor housing cups 42a, 42b that are engageable with the ground surface. The castor housing cups 42a, 42b are at least partially hollow and define a passage 43 to receive the support legs 18a, 18b. At the distal end of the cups 42a, 42b are castor wheels 44. Each wheel 44 is fit within a

slot in one of the cups 42 and as such is able to spin on the wheel axis, but unable to turn or rotate horizontally. The wheels 44 are designed to assist the user in maneuvering the desk 10 from one location to another. Although castor wheels 44 are shown in the illustrated embodiment, the invention recognizes that fixed wheelless castors or castor balls could be

5 alternatively used.

At the distal end of the seat connection leg 20 is a seat support 50. The seat support 50 is comprised of a curved tubular base connection section 52 connected to a vertically extending tubular seat post 54. In the illustrated embodiment, the curved base connection section 52 is formed integrally with seat connection leg 20, and connects the seat support 50 to the seat connection leg 20. The base connection section 52 may be attached to the seat connection leg 20 in a variety of ways, each of which is within the scope of the present invention. For instance the base connection section 52 may be welded to the leg 20, or may have a male extension which fits within a passage in the outer end of the seat connection leg 20. Further, the base connection section 52 may have a threaded end which 15 mates with the seat connection leg 20.

As noted above, vertically extending seat post 54 is connected to base connection section 52. Similar to the discussion above, the specific means of connection between the base connection section 52 and seat post 54 can take a variety of forms such as welding, threading or any other means of attachment commonly employed in the art. The 20 seat post 54 includes an aperture at its bottom configured to receive the pin 56 of a freely rotatable castor wheel 58, which is adapted to engage the ground surface. Unlike the castors 44 located at the ends of the support legs 18a, 18b, the castor wheel 58 located beneath the seat post 54 is horizontally rotatable about the axis of the castor wheel pin 56. The free rotation of the castor wheel 58 allows for ease of movement and turning of the desk 10 by 25 the user during movement.

The upper portion of the seat post 54 is at least partially hollow. The inner region of the hollow seat post 54 defines a passage 55 for receiving a height adjustment arrangement 56. In the illustrated embodiment the height adjustment arrangement 56 includes a sleeve 57 comprised of two sleeve halves 59a, 59b. The sleeve 57 defines a

vertical passage for a height adjustment cylinder 60. The height adjustment cylinder 60 includes a stationary rod 61 and vertically extending cylinder section 62. The cylinder section 62 includes a compressed gas spring, in a known manner, or any other comparable spring or biasing arrangement (not shown).

5 The height adjustment arrangement 51 is connected to a seat base plate 64. The seat base plate 64 is a rectangular piece of metal mounted to the underside 66 of the seat 17. The seat base plate 64 includes a series of apertures 68 along its side edges configured to receive a seat securing means. The seat securing means (not shown) may be a nut and bolt arrangement or other commonly used means of attachment. The apertures 68 of the seat base 10 plate 64 are configured to align with holes 70 on the seat 17 of the desk 10. As seen in the illustrated embodiment, the seat 17 of the desk has four spaced holes 70 configured to receive a securing means. The securing means may be inserted through the holes 70 of the seat 17 and through the apertures 68 of the seat base plate 64. The plurality of apertures 68 on the seat base plate 64 allow the seat to be adjusted forward and backward in relation to the 15 desk top 12.

Extending laterally from the seat base plate 64 is a pivotable height adjustment cylinder actuation lever 72. The outer end of actuation lever 72 is adapted to be manually engaged by a user, and the inner end of actuation lever 72 is engageable with the cylinder section 62 of the height adjustment cylinder 60. By applying upward pressure on the outer 20 end of lever 72, the inner end of lever 72 actuates a release button on the upper end of cylinder section 62, which enables the cylinder section 62 to move up or down on a vertical axis defined by the stationary rod 61. Once the lever 72 is actuated, depending on the amount of downward pressure applied to the cylinder section 62, the cylinder section 62 will move up or down. In the absence of downward pressure, the compressed spring pushes cylinder 25 section 62 upward, thereby raising the height of the seat 17. When substantial downward pressure is applied to the cylinder section 62, e.g. by the weight of a user, the spring is collapsed and the seat 17 moves downward.

In use and operation, the desk 10 is easily movable by virtue of the attached wheels 44, 58. Due to the interconnection of the seat 17 to the desk top 12, desk 10 moves as

a unit. Such an arrangement allows for ease of movement, and adjustment of the forward facing position of desk 10. Specifically, the front end of the desk 10 can be lifted and the desk 10 can be maneuvered on the wheel 58. Alternatively, desk 10 can be moved by applying a horizontal force to the back of seat 17.

5 Figures 2 and 3 illustrate an alternative embodiment of the desk of the present invention. The alternative embodiment shown in figure 2 and 3 shares several of the key components of the embodiment discussed in reference to figure 1 and therefore those shared components need not be discussed in detail and will be referred to using like numerals. Figures 2 and 3 illustrate a desk 100 with a modified base 70. As illustrated in figure 2 and 3, 10 the bell 22 shown in figure 1 has been replaced with receiving sleeve 72. The receiving sleeve 72 defines an opening 73 at its upper end configured to receive and secure the leg 14. The lower end of the receiving sleeve 72 is configured to fit within a passage 74 on a desk support wing 75. The desk support wing 75 is comprised of two integral support members 76a, 76b for ground engagement and support of the desk 10. The desk support wing 75 15 replaces the support arms 18a, 18b of the previous embodiment. At the outer end of the support members 76a and 76b are two rollers 77a, 77b. The rollers 77a, 77b are comprised of a housing 78 with an axle 79 therein and a wheel 80 that spins freely on the axle 79 within an opening defined by the housing 78. The housing 78 is attached to the underside of the support members 76a, 76b by conventional attachment means.

20 Connecting the base 70 to the seat 17 is a modified seat connection leg 82. As illustrated in Fig. 2 the seat connection leg 82 is a triangular tubular member configured to be received within a passage (not shown) defined at the intersection of the support members 76a, 76b of the desk support wing 75. The seat connection leg 82 terminates at the intersection of the support members 83a, 83b of a seat support wing 84. The seat support 25 wing 84 is similarly constructed to the desk support wing 75 and defines a passage 85 configured to receive a seat receiving sleeve 86. The seat receiving sleeve 86 defines a passage 87 configured to receive a seat post 54. The seat post 54 receives the height adjustment arrangement 51 as previously discussed.

At the ends of the support members 83a, 83b of the seat support wing 75 are a pair of rollers 88a, 88b. The rollers 88a, 88b may be of similar construction to the rollers 77a, 77b of the desk support wing and include a housing 78 defining an opening through which the wheels 80 extend. Alternatively, the rollers 88a, 88b of the seat support wing 84, 5 may be spring loaded locking rollers 101. As illustrated in figure 6, the spring loaded locking roller 101 includes a housing 108 defining a slot 103 through which the wheel 92 extends. The housing 108 includes a rounded upper portion 112, a flat ground engaging portion 114 and an internal spring assembly 90. The spring assembly 90 includes a spring 105 mounted to an actuation cup 107. The actuation cup 107 rests on the axle 109 of the wheel 92. Thus, 10 the wheel 92 of the locking roller 101 spins freely when there is no downward pressure applied to the seat 17. However, when downward pressure is applied to the seat 17, such as by a person sitting in the seat 17, the additional downward pressure causes the spring assembly 90 to compress, thereby causing the wheel 92 to move upwardly and into the housing 108 until the ground engaging portion 114 rests firmly on the floor. Alternatively, in 15 the absence of downward pressure, the spring 105 expands and the wheel 92 moves downwardly to lift the housing 108 upwardly, so that wheel 92 engages the floor and spins freely within the housing 108.

In use and operation, the desk 100 is easily movable by virtue of the attached wheels 78 and 88. Due to the interconnection of the seat 17 to the desk top 12, the entire unit 20 moves as one. Such an arrangement allows for ease of movement, and adjustment of the forward facing position. In this embodiment, however, it is desirable to move the desk on the wheels 88 of the desk support wing 75. Specifically, the rear end of the desk can be lifted and pushed around on the wheels 88 of the desk support wing 75. A handle 94 is added to the seat 17 of the embodiment shown in figure 1 to assist the user in moving the desk 100.

25 Figures 4 and 5 illustrates another alternative embodiment of the desk of the present invention, shown generally at 200. The alternative embodiment shown in figure 5 shares several of the key components of the embodiment discussed in reference to figures 1-4 and therefore those shared components need not be discussed in detail and will be referred to using like numerals. Figures 4 and 5 illustrate the desk 200 with a modified base 202. As

illustrated in figure 5 the bell 22 and base plate 21 shown in figure 1 have been removed. However, as illustrated, the leg 14 remains connected at its distal end to a pair of curved support legs 204a, 204b thereby forming the base 202 of the desk 200. The leg 14 and support legs 204a, 204b can be connected by welding or other known means of attachment.

5 At the distal end of the desk support legs are a pair of matching tubular castor housing support cups 42a, 42b as discussed in reference to figure 1. The castor housing cups 42a, 42b are at least partially hollow and define a passage 43 to receive the support legs 18a, 18b. At the distal end of the cups 42a, 42b are castor wheels 44. The wheels 44 are fit within a slot on the cup 42 and as such are able to spin on the wheel axis, but unable to turn or rotate

10 horizontally.

Also connected at the base 202 to the leg 14 is a tubular seat connection leg 206. The seat connection leg 206 extends from the leg 14 and connects with a vertically extending seat post 208. Adjacent the connection of the seat connection leg 206 to the seat post 208 are two curved tubular seat support legs 210a, 210b connected to the seat connection leg 206. At the distal ends of the seat support legs 210a, 210b are a pair of castor housing cups 212a, 212b. The castor housing cups 210a, 210b can house a fixed wheel 44 as discussed in reference to 42a, 42b, or alternatively, the cups 210a, 210b can house a spring loaded wheel similar to that shown in figure 6. Regardless, the desk can be moved most easily by lifting the seat 17 using the handle 94 on the seat 17, and maneuvering the desk on

15 the fixed wheels connected to the support legs 204a, 204b.

20

It is understood that the construction and configuration of desk is representative of any desk adapted to be connected to a seat and movable as a single unit, and is not limited to the specific configurations as shown and described. For example, while the desktop 12 is described as being rectangular, it is also understood that the desktop may

25 take any variety of shapes. It is further understood that, while the numerous support structures are described as tubular, any shape of support structure that enables the interaction of the various components of the desk 10 is desirable.

CLAIMS

I claim:

1. A seating apparatus comprising:
 - a desktop connected to a vertically extending desk leg wherein said desktop is vertically adjustable on said desk leg;
 - a base arrangement engageable with the ground comprising a pair of support legs, a seat connection leg, and a desk leg, wherein the ends of said support legs and seat connection leg surround the end of said desk leg;
 - a seat support assembly attached to said seat connection leg comprising a seat post housing a means for raising and lowering a seat support plate; and
 - a seat mounted to the seat support plate.
2. The seating apparatus of claim 1, wherein the underside of the desktop comprises a mounting plate including a downwardly extending extension leg configured to fit within a passage defined by the desk leg and vertically moveable therein.
3. The seating apparatus of claim 2, wherein the extension leg includes a plurality of apertures that are configured to align with a hole at the top of the deskleg wherein both the apertures and the hole are configured to receive a retention means therethrough.
4. The seating apparatus of claim 1, wherein the support legs and the seat connection leg include castors engageable with the ground at their distal ends.
5. The seating apparatus of claim 4, wherein at least one of the castors comprises a spring loaded wheel.
6. The seating apparatus of claim 4, wherein the castors of the support legs cannot be rotated horizontally and wherein the castor connected to the seat connection leg rotates horizontally along the axis of a connection pin.
7. The seating apparatus of claim 1, wherein the base arrangement comprises a base plate connected to the two support legs, the desk leg and the seat connection leg; and a

bell configured to fit over the two support legs and the seat connection leg and around the desk leg connected to the base plate.

8. The seating apparatus of claim 1, wherein the underside of the desktop comprises a finger grip for ease of maneuverability of the seating apparatus.

9. The seating apparatus of claim 1, wherein the seat support assembly further comprises two seat support legs engageable with the ground and connected to said seat post.

10. The seating apparatus of claim 9, wherein the support legs and the seat support legs include castors engageable with the ground.

11. The seating apparatus of claim 10, wherein the castors on the seat support legs are spring loaded.

12. A seat and desk assembly comprising a desk, a seat and base wherein the desk comprises a desktop and a leg extending downwardly therefrom connected to the base; wherein the base comprises two support legs and a seat connection leg extending laterally therefrom; wherein the seat comprises a downwardly extending seat post connected to the

5 seat connection leg and wherein the support legs and seat post have castors connected thereto.

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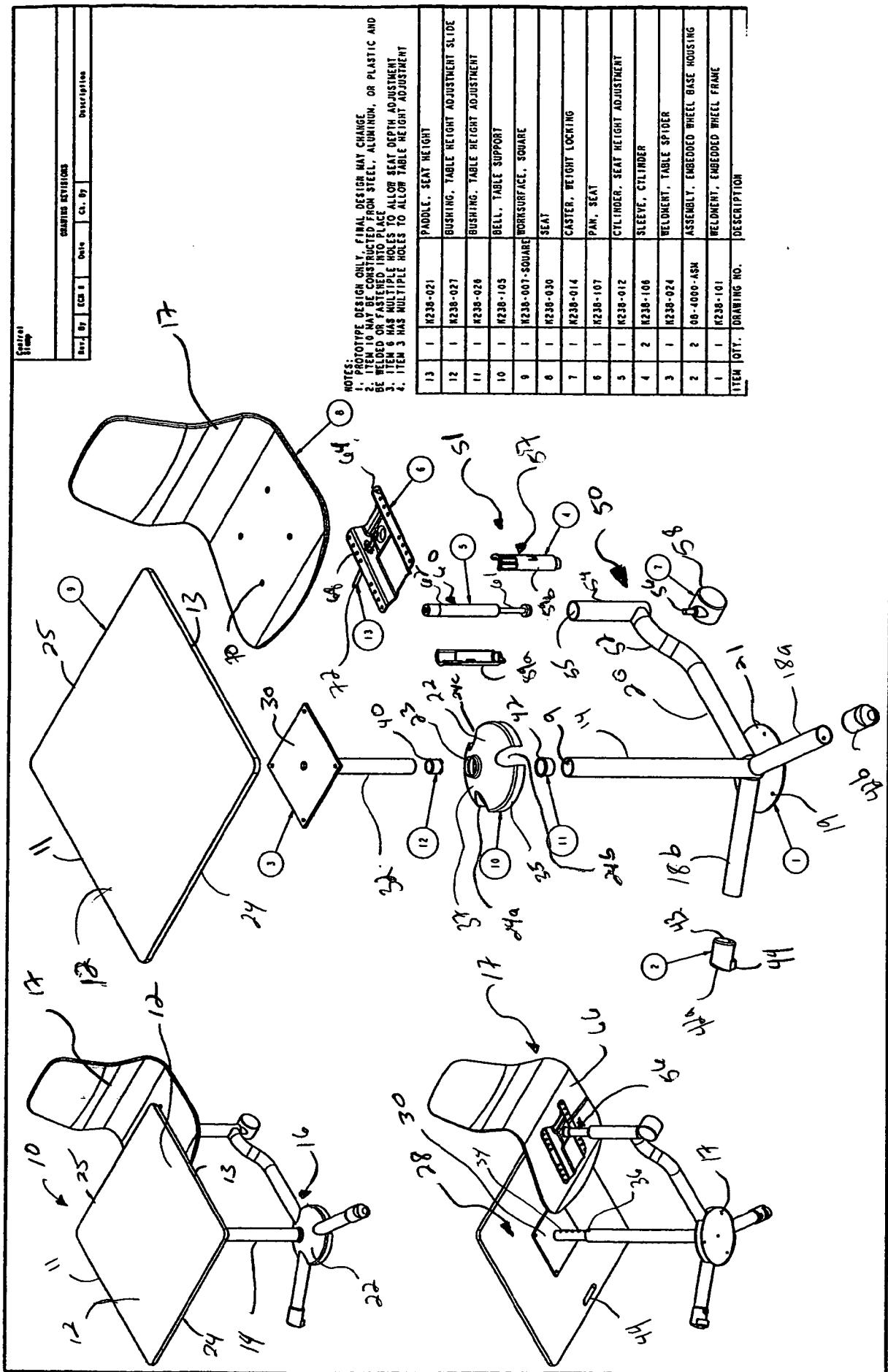
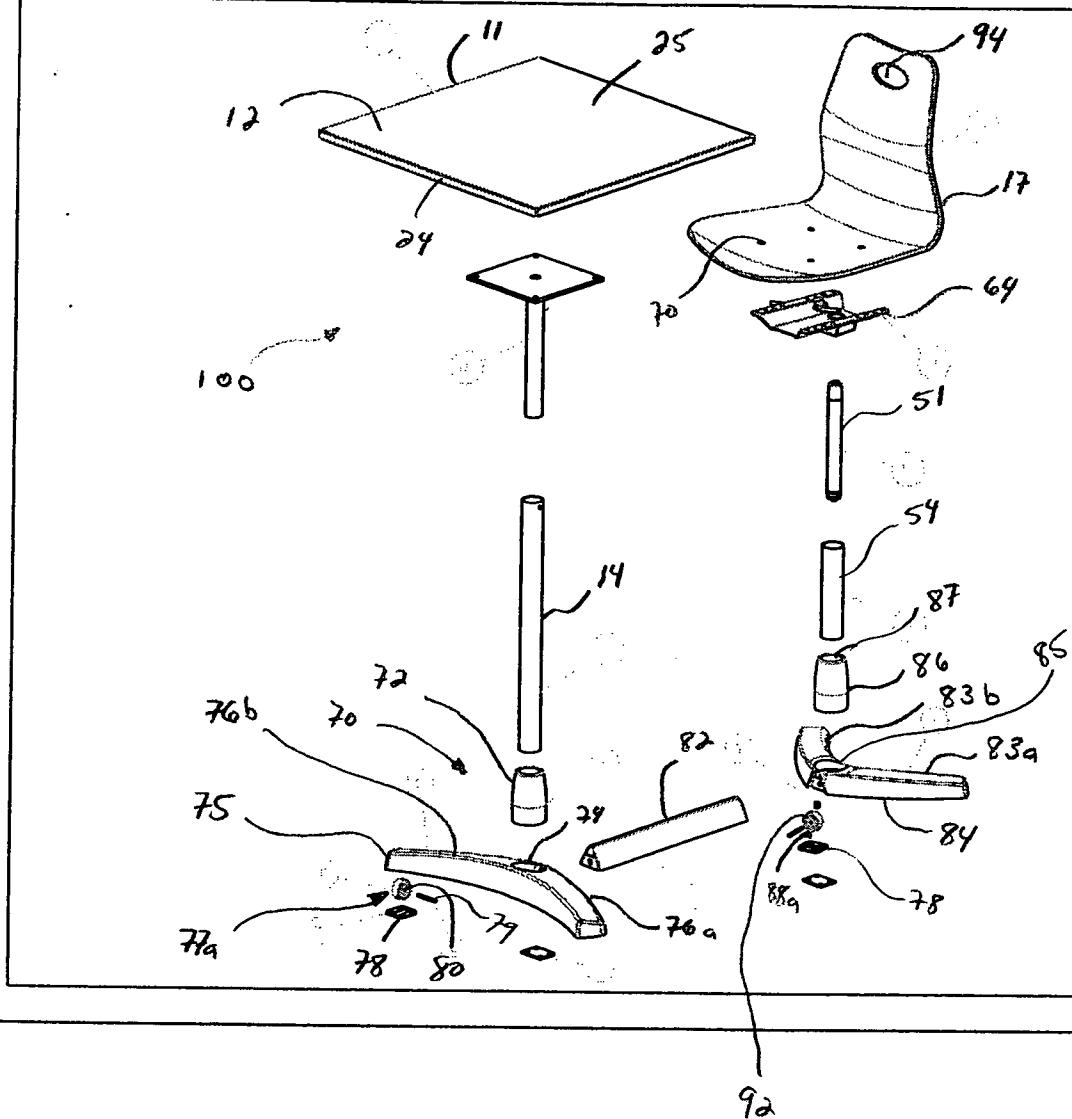


FIG 61



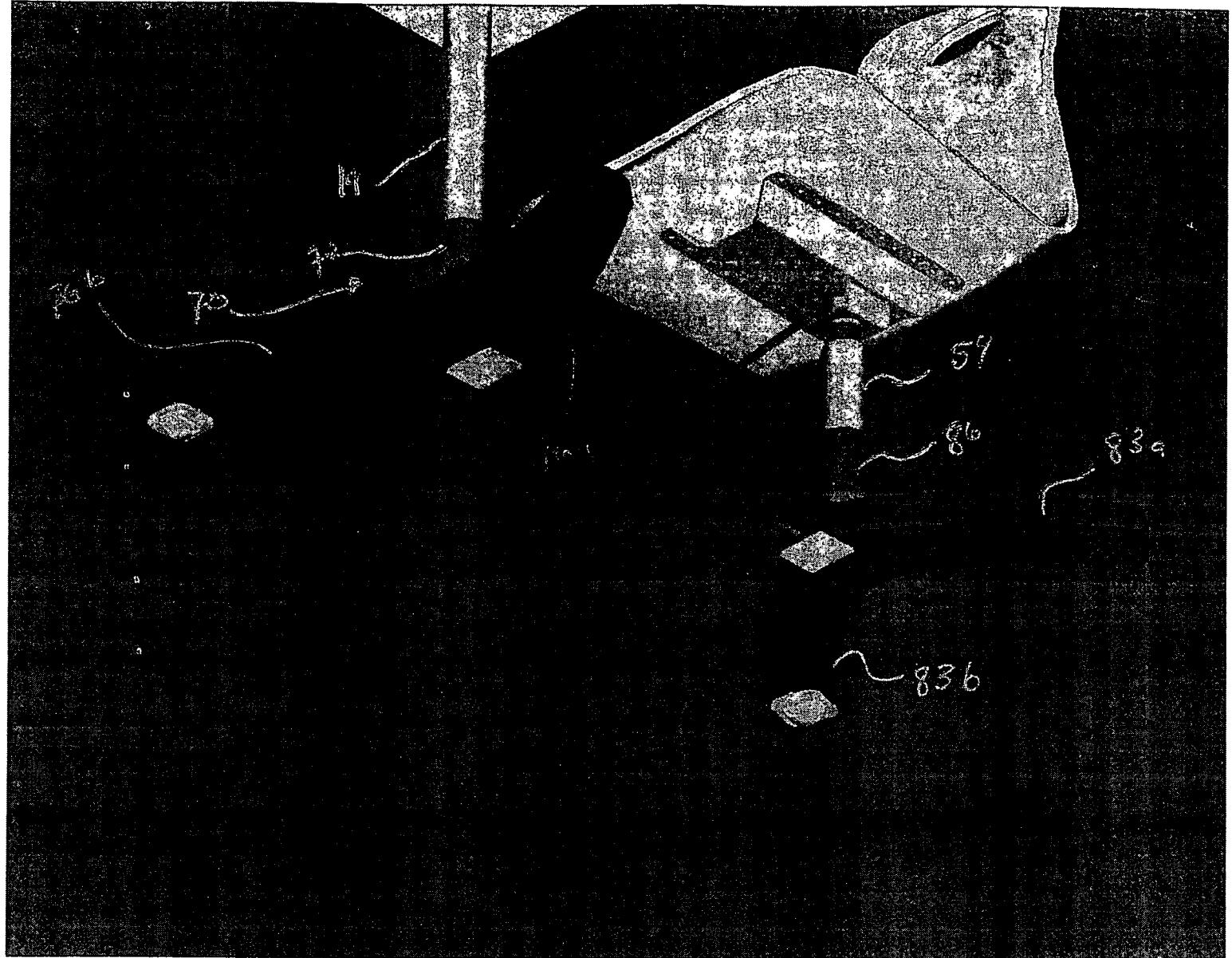


FIG. 3

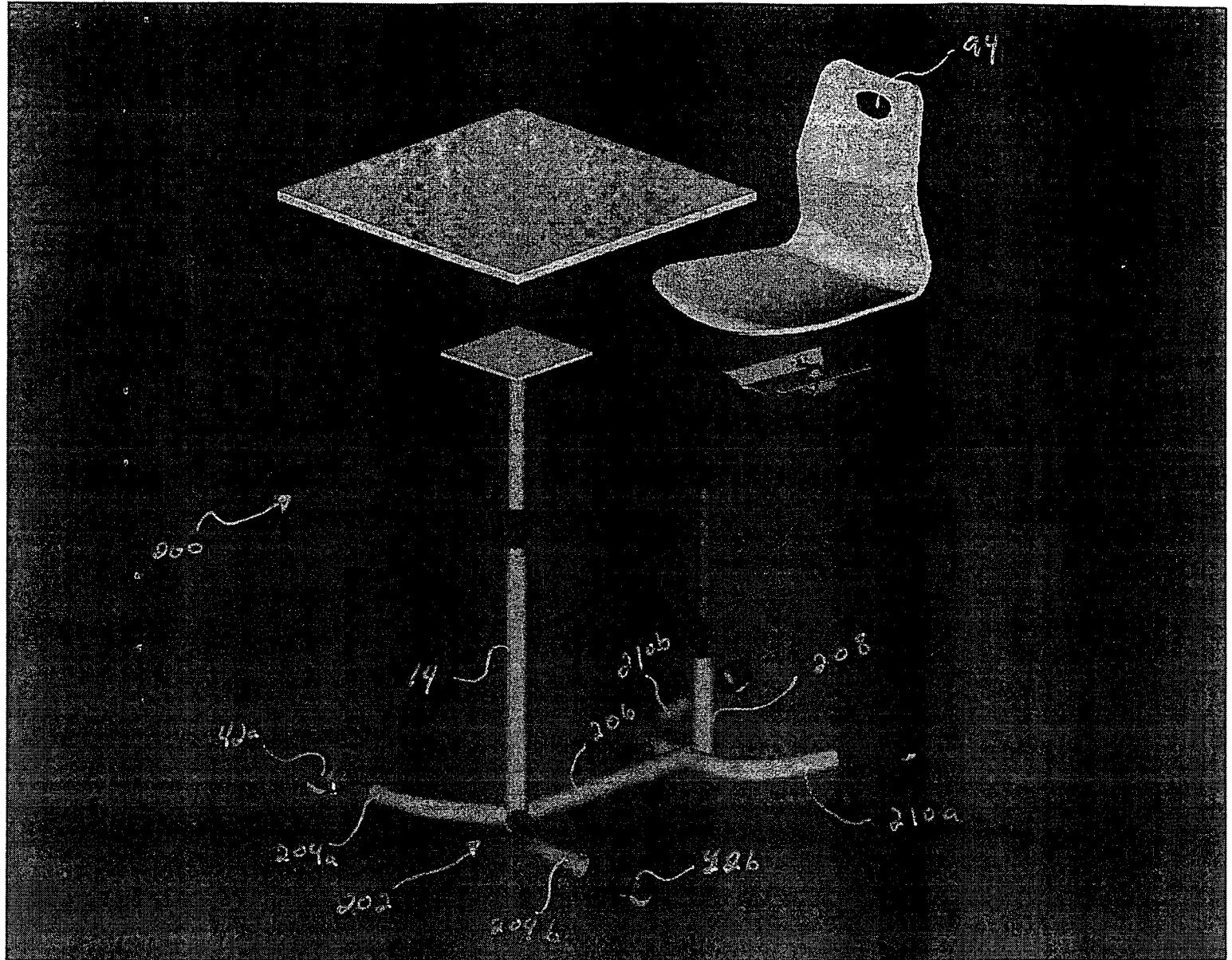


FIG. 4

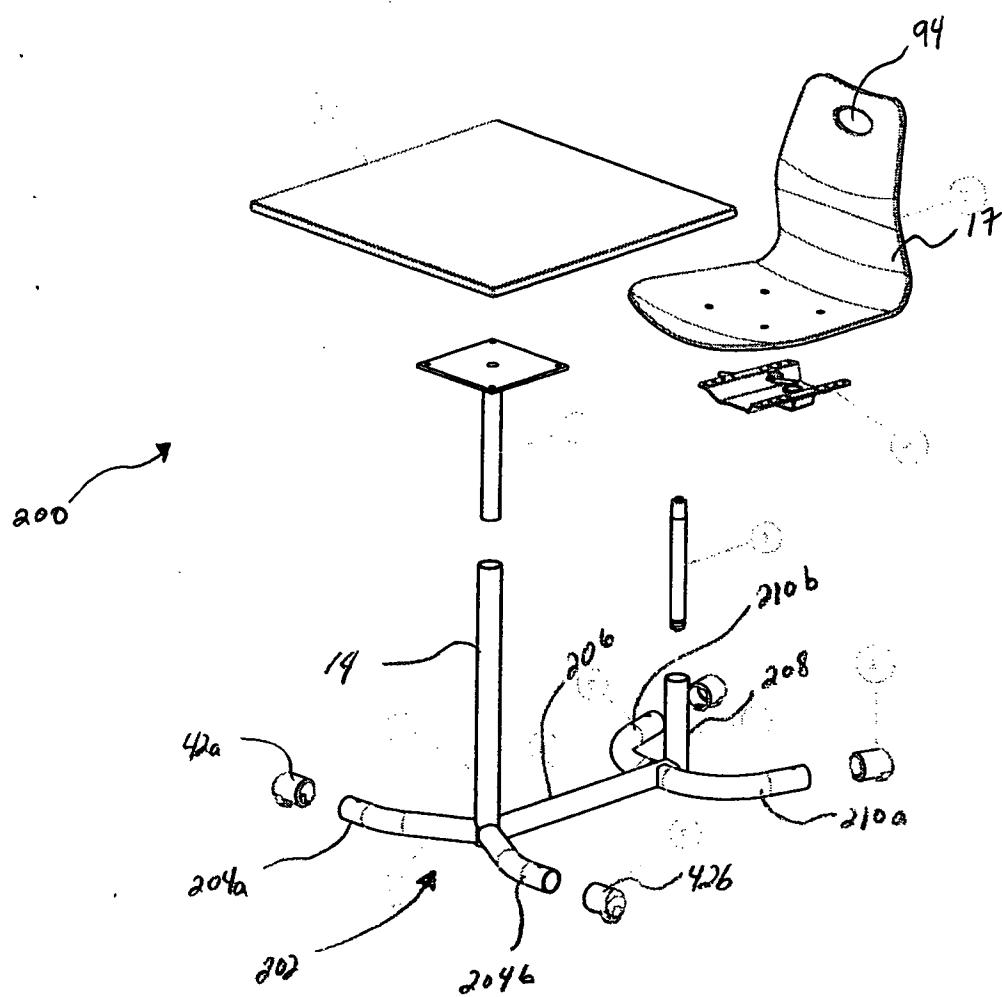


FIG. 5

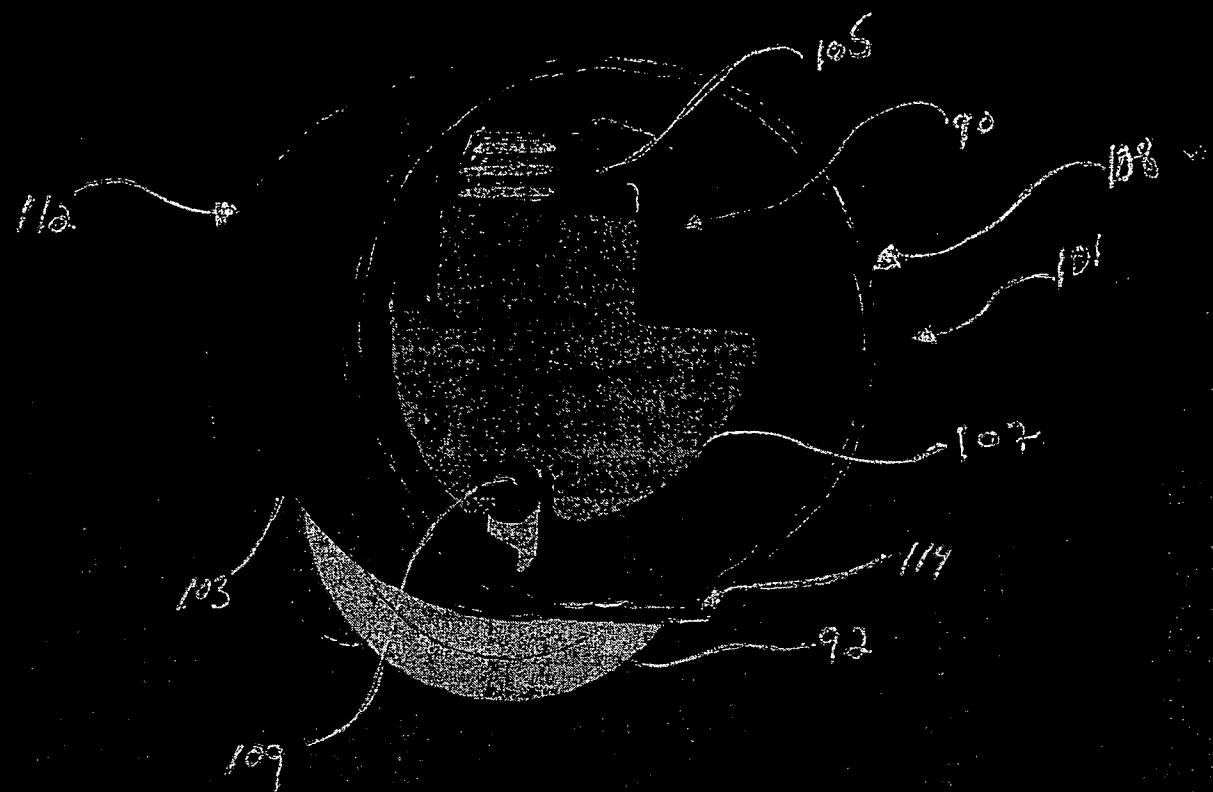


FIG 6